I claim:

1. A sulfonated, cross-linked ion exchange resin catalyst comprising monomer units of (a) from 0.1 to 10 percent by weight of one or more polyvinylaromatic monomers and (b) from 90 to 99.9 percent by weight of one or more monounsaturated vinylaromatic monomers; wherein the catalyst contains 0.1 to 1.0 millimole sulfone groups per gram dry catalyst, and has an acid capacity of 4.0 to 6.0 millimole sulfonic acid groups per gram dry catalyst.

2. The cross-linked ion exchange resin catalyst of claim 1, wherein the catalyst is in the form of spherical beads and is capable of catalyzing the formation of at least one bisphenol upon contacting phenols and aldehydes or ketones.

3. The cross-linked ion exchange resin catalyst of claim 2, wherein the catalyst resin beads are prepared from a jetted, suspension polymerized polystyrene/divinylbenzene copolymer having from 0.1 to 1.0 millimole of sulfone groups per gram of dry catalyst.

4. A catalyst for producing at least one bisphenol, which comprises contacting phenols and aldehydes or ketones with a sulfonated, cross-linked ion exchange resin functionalized with strongly acid cation-exchange groups.

5. The catalyst according to claim 4, wherein at least one bisphenol is bisphenol-A.

6. The catalyst according to claim 4, wherein the phenols and aldehydes or ketones are from about 1% to about 40% by weight, based on the total weight of the phenols and aldehydes or ketones.

7. The catalyst according to claim 4, wherein the ion exchange resin is in the form of spherical beads prepared from a jetted, suspension polymerized polystyrene/divinylbenzene copolymer having from 0.1 to 1.0 millimole of sulfone groups per gram of dry catalyst.

8. The catalyst according to claim 4, wherein 1 to 35 mol % of the sulfonic acid groups contain an ionically attached thiol promoter.

9. A process for catalyzing condensation reactions between phenols and aldehydes or ketones producing one or more bisphenols, which comprises contacting the phenols and aldehydes or ketones with a a sulfonated, cross-linked ion exchange resin functionalized with strongly acid cation-exchange groups.

10. The process according to claim 9, wherein at least one bisphenol is bisphenol-A.

11. The process according to claim 9, wherein the phenols and aldehydes or ketones are from about 1% to about 40% by weight, based on the total weight of the phenols and aldehydes or ketones.

12. The process according to claim 9, wherein the ion exchange resin is in the form of spherical beads prepared from a jetted, suspension polymerized polystyrene divinyl benzene copolymer having from 0.1 to 1.0 millimole of sulfone groups per gram of dry catalyst.

13. The process of claim 9, wherein the phenol and acetone are present in a ratio of from about 20:1 to about 2:1.

14. The process of claim 9, wherein the temperature at which the reactants contact the beads is from about 40° C to about 100° C.

15. The process of claim 9, wherein 1 to 35 mol % of the sulfonic acid groups contain an ionically attached thiol promoter.

16. A process for preparing bisphenol-A from phenol and acetone in a fixed bed reactor comprising a sulfonated, cross-linked ion exchange resin functionalized with strongly acid cation-exchange groups.

17. The process according to claim 16, wherein the ion exchange resin is in the form of spherical beads prepared from a jetted, suspension

polymerized polystyrene divinyl benzene copolymer having from 0.1 to 1.0 millimole of sulfone groups per gram of dry catalyst.

18. The process of claim 16, wherein the phenol and acetone are present in a ratio of from about 20:1 to about 2:1.

19. The process of claim 16, wherein 1 to 35 mol % of the sulfonic acid groups contain an ionically attached thiol promoter.

20. A process for preparing a sulfonated cross-linked ion exchange polymer of Claim 1, comprising the steps of contacting a polystyrene polymer crosslinked with 1-8% divinylbenzene with sulfuric acid of concentration between 101 and 106%, an acid to copolymer ratio of 6:1 to 20:1, at a temperature between 80 and 140C, for 1 to 10 hours.